



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,644	12/28/2001	Gordon Haggott Beckhart	MCT-0103	4114

7590

04/07/2004

Clarence A Green  
Perman & Green  
425 Post Road  
Fairfield, CT 06824

EXAMINER
----------

TRAN, KHOA H

ART UNIT	PAPER NUMBER
----------	--------------

3634

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/035,644

Applicant(s)

BECKHART ET AL.

Examiner

Khoa Tran

Art Unit

3634

MW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 is/are allowed.
- 6) ☒ Claim(s) 1-15, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

The indicated allowability of claims 1-3, 5-9, 11, and 12 in previous Office action is withdrawn in view of the new applied reference of Fosnight et al. in view of Schulte. The rejections based on the newly cited references as advance below.

### ***Drawings***

The proposed drawings correction and/or the proposed substitute sheets of drawings, filed on November 05, 2003 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(f) states that no amendment may introduce new matter into the disclosure of an application. With respect to Figure 1, the added material of a square element, referenced by numeral 38L, constitutes new matter because the original disclosure does not support the showing of a square element in an interior of the FOUP that is referenced by numeral 38L.

The drawings are still objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "an exterior partial S-shaped cutout" in claim 7 and "the plurality of retention springs is designed to mate with a lip of a front opening unified pod" in claim 12 must be shown or the features canceled from the claims. Correction is required.

Applicant is required to submit a proposed drawing correction in reply to this Office action.

### ***Specification***

The specification is objected to because there is no mentioning of reference numeral "10" as illustrated by Figure 1. Appropriate correction is required.

The amendment filed on November 05, 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material of a reference numeral "38L" constitutes new matter because the original drawings do not support a reference numeral 38L for referencing a square element in the FOUP interior. Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. With respect to claim 14, the recitation of the spring member (38, 38') being a spring "loaded" member constitutes new matter because there is no support in the original specification of the spring member being a spring "loaded" member. Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 10, 11, 13, 14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fosnight et al. in view of Schulte. Fosnight et al. disclose a semiconductor cassette reducer interlock with a unified pod carrier comprising a unified pod carrier (20) houses a semiconductor cassette reducer (22), see Figure 2, the semiconductor cassette reducer comprises a first substantially U-shaped plate (48) having a pair of arm cutouts, see Figures 5B, a second substantially U-shaped plate (46) having a pair of arm cutouts, and first and second wafer supports (28) comprise of lips (30) joined between first and second substantially U-shaped plates, at least two latching mechanisms (42, 50), see Figure 7, engage with the unified pod carrier in order to prevent any significant side-to-side movement of the semiconductor cassette reducer in the unified pod carrier. The latching mechanism of Fosnight et al. is not a spring loaded latching mechanism. However, Schulte teaches a spring loaded (41) latching mechanism (23) that locks the semiconductor cassette with the carrier. See Figures 1-4. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the latching mechanism of Fosnight et al. to be a spring loaded latching mechanism in order to control the length of the latching mechanism to

extend through and attach to the carrier and prevent the cassette from falling out of the carrier, see column 3, lines 13-16 and 54-55.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fosnight et al. in view of Schulte as applied to claims 1-6, 10, 11, 13, 14, 17, and 18 above, and further in view of Ohori. Ohori teaches a top plate (A) of a semiconductor cassette reducer has an exterior partial S-shaped cutout located adjacent to the side panel (C1). See Figure 7. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the top plate of Fosnight et al. with provision of exterior partial S-shaped cutout as taught by Ohori for aesthetic purpose or reduce the weight of the semiconductor cassette thus producing no new matter or unexpected results to the device.

Claims 8, 9, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fosnight et al. in view of Schulte as applied to claims 1-6, 10, 11, 13, 14, 17, and 18 above, and further in view of Tseng. Tseng teaches a semiconductor cassette (30) having a pair of columns (42 and 44) at the rear of the rack. See Figures 2 and 4. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the semiconductor cassette of Fosnight et al. in view of Schulte with the provision of a pair of columns at the rear of the rack as taught by Tseng in order to support the rear of the wafer and to prevent the wafer being sliding through at the rear of the rack.

Claim 12, as best as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Fosnight et al. in view of Schulte as applied to claims 1-6, 10, 11, 13, 14, 17, and 18 above, and further in view of Fujimori et al. Fujimori et al. teach a unified pod carrier (1) having a lip-locking mean (18) that has clamping bores (19) design to mate with the latching mechanisms (34, 38, 51). See Figures 1 and 11. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the unified pod carrier of Fosnight et al. to include a lip with clamping bores thereof as taught by Fujimori et al. in order to detain the latch mechanisms therein because it is well-within the level of skill in the art to utilize the known features of the art for the purpose for which they are known.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bhatt et al., Nyseth ('427), Nyseth et al. ('567), Mikkelsen et al., Williams et al., Doche, Ishikawa, Chang et al., Wu et al., Terashima, Garric et al., Gallagher et al., Kinpara et al., are cited to show a similar semiconductor cassette reducer having retention springs that is related to applicant's design.

***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter:

Claim 16 is allowable over the prior art of record because none of prior art of record teaches or suggests a semiconductor cassette reducer possessing the entire combination of features specified by the claim. In particular, there is no teaching or

suggestion of the first substantially U-shaped plate has a plurality of flexible disks, see lines 11-12 of claim 16.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-15, 17, and 18 have been considered but are moot in view of the new grounds of rejection.

With respect to applicant's remark that no amendment is necessary to show the S-shaped cutout recited in claim 7 because Figure 3 shown this feature. The examiner respectfully disagrees. It should be noted that the cutout in Figure 3 appears to be a notch and it does not show an "S" shaped cutout. Further, applicant's annotation indicated that the cutout is "substantial" S formed further support examiner's position that the cutout is not an "S" shaped cutout.

With respect to applicant's argument to the drawings that the adding of a square element and references by numeral "38L" in Figure 1 are not new matter because on page 3, lines 24-25, the specification provide supports for these changes. However, this is not the case. It should be noted that on page 3, lines 24-25, recites that "The back two retention springs 38' lock into a depression (lip) in the FOUP" is insufficient basis for applicant to add on a specific structure of a rectangular element located in the interior of FOUP. Applicant's argument that since the specification recites "a depression (lip) in the FOUP" it's readily understood by one of ordinary skill in the art that the depressions in the FOUP are depressions in the interior wall face of the FOUP and it's also readily understood that the depression has a generally rectangular profile so that it would be able to lock with the retention springs (38'). This argument is not persuasive



because applicant's interpretation to lines 24-25 on page 3 is out of context and incorrect. It should be noted that there is no clear suggestion from the specification that there is more than one depression (lip) in the FOUP and the specification merely suggests a depression as a "(lip)" which it's read on the depression border formed with the top plate and the sidewalls of the FOUP. Accordingly, base on what has been recited in the original specification, it appears that the back circular disks members (38') are supposed to engage with the depression (lip) that border around the top plate that in connection with the sides or sidewalls of the FOUP.

With respect to applicant argument on page 11, second paragraph, that by adding reference numeral 38L to the specification is not considered as new matter, this is correct if the reference numeral referencing an existing structure that is illustrated by the original drawings. However this is not the case, note that reference numeral 38L is referencing a new structure that is not shown in the original filed drawings.

With respect to applicant's argument on page 12 that the examiner ignore the language call for a semiconductor cassette "reducer", it should be note that the mere use of a unique terminology by applicant will not preclude the prior art structure from reading on the structure of the claimed invention. In particular, the claim defining the structure is met by the prior art irrespective of whether one naming the structure a semiconductor cassette reducer or using other lexicology.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khan Tran whose telephone number is (703) 306-3437.

The examiner can normally be reached on Monday through Thursday from 9:30 A.M. to 7:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stool, can be reached on (703) 308-2686. The fax phone number for this Group before a final Office action is (703) 872-9306 and after a final Office action is (703) 872-9327.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khoa Tran

February 18, 2004



DANIEL P. STODOLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600